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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,390	11/09/2000	HORST GRAFE	DT-3734	5453

30377 7590 07/16/2003

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EXAMINER

DRUAN, THOMAS J

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 07/16/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/710,390

Applicant(s)

GRAFE ET AL. *Ch*

Examiner

Thomas J. Druan, Jr.

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 10-11 & 14-17, in Paper No. 8 is acknowledged. However, the Examiner has reviewed the claims and will examine all of claims 10-17 in this Office Action.

***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 10 November 1999. It is noted, however, that applicant has not filed a certified copy of the 19953908.1 application as required by 35 U.S.C. 119(b).

***Claim Objections***

3. Claim 14 is objected to because of the following informalities: line 3, "radially" should likely be --axially--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-13 & 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 2,076,969 to Sieger in view of USPN 5,207,138 to Sato et al.

Sieger discloses the invention substantially as claimed including a shear device for cutting a strip, said shear device comprising a frame 4e, an upper blade assembly 4c (a drum as seen by substantially equal radii along a diameter which includes a upper blade 4a) and a lower blade assembly 4d (a beam bridge as seen by a reduced radius opposite a lower blade 4b), wherein said upper blade assembly and lower blade assembly are permanently rotationally connected via intermeshing gears (p. 1, column 2, lines 48-51) which have diameters corresponding roughly to the diameters of respective blades (fig. 1) and would inherently be manufactured so as to be backlash free. The different diameters of the intermeshing gears will produce a different but finite number of rotations of the upper and lower blades through a cutting zone. Roller means 19 is connected to an adjusting means 23 which moves the roller for lifting a strip before passing of the lower blade and for lowering the strip before passing of the upper blade (p. 2, column 2, lines 50-62). The roller means will accomplish this as the upper blade will passing a cutting zone while the roller is lowered (as shown to be slightly after the position in fig. 1) and will be raised while the lower blade is in a cutting zone (during a cutting action).

Sieger discloses an upper blade assembly having a smaller diameter than its lower blade assembly, though it would have been obvious to one skilled in the art at the time of the invention to switch the position of the upper blade assembly with the lower blade assembly since simple reversal of parts is old and well known in the art that, and

Art Unit: 3724

having a smaller diameter lower cutting assembly would allow more room for the strip to be directed under table 3.

Sieger does not disclose an upper blade drum and lower blade drum as claimed; however, it would have been obvious to one skilled in the art at the time of the invention to provide the combination of an upper blade drum and lower blade drum or the combination of an upper beam bridge and lower blade drum since these combinations are art recognized equivalents for the purpose of shearing a strip material passing therebetween. Sato et al. discloses an example of an upper blade drum 53 and lower blade drum 54.

Sieger does not disclose two pinch-roller sets in front of and behind the upper and lower blade assemblies; however, it is old and well known in the arts to provide a shearing device with upstream and downstream pinch rollers in order to tension the strip being cut by cooperating cutting devices since tensioning a web facilitates cutting. Sato et al. discloses an example of these pinch rollers 89.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sieger in view of Sato et al. in further view of USPN 3,037,396 to Martin.

The combination of Sieger in view of Sato et al. discloses the invention substantially as claimed, but lacks the specific means to minimize backlash. Martin teaches providing a lower blade drum 4 with two gear portions 29/30 axially divided with the two gear portions secured together with a bolt 37 so as to angularly position the gear portion with respect to one another, thereby preventing backlash (column 3, lines

Art Unit: 3724

16-23). Therefore, it would have been obvious to use the gear portions of Martin in the shear device of Sieger in view of Sato et al. in order to prevent backlash.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Talbot, Sieger 581, Hergenhan, Tokuno, Yoshida et al. and Grenz et al. are cited to show further examples of web-diverting devices.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Druan, Jr. whose telephone number is 703-308-4200. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

Art Unit: 3724

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

*MM*  
tjd

July 14, 2003

*Boyer Ashley*  
BOYER ASHLEY  
PRIMARY EXAMINER